



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/545,192

05/18/2006

Lucas Everhardus Maria Langezaal

6900-22

1378

30448

7590

04/13/2009

AKERMAN SENTERFITT

P.O. BOX 3188

WEST PALM BEACH, FL 33402-3188

EXAMINER

WILLIAMS, MONICA L

ART UNIT

PAPER NUMBER

3644

MAIL DATE

DELIVERY MODE

04/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/545,192	Applicant(s) LANGEZAAL, LUCAS EVERHARDUS MARIA	
	Examiner MONICA L. WILLIAMS	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,2,4-8 and 11-23 is/are pending in the application.
 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-7, 11, and 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalbskopf (EP 0294261 A1) in view of Hori et al (4,972,627).

3. In re claim 1, with reference to col.2 lines 5-13 and col.3 lines 8-30, Kalbskopf discloses a method of manufacturing a culture medium on which plants can be grown characterized in that it comprises the steps of a) mixing a particulate base material, chosen from at least one of organic and inorganic materials, with a thermoplastic biologically degradable binding agent, b) heating at least the binding agent in order to at least partly fluidize it, c) cooling the mixture so as to substantially solidify the binding agent and whereby at least part of the base material becomes bonded by means of the binding agent. Kalbskopf discloses the claimed invention except for multiple layers of base material wrapped around one another.

4. However, with reference to col.3 lines 14-51 and Figures 14, 15, and 16, Hori et al disclose a culture medium with a first layer (152), second layer (141), and third layer (143) of base material, the base material is then shaped such that the first and third layer move toward each other such that the second layer is completely surrounded by

Art Unit: 3644

the first layer. The advantage of this is to offer more moisture and better protection for the plant. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified culture medium of Kalbskopf to have multiple layers and to be shaped as taught by Hori et al in order to offer more moisture and better protection for the plant.

5. In re claims 2 and 16-18, with reference to col.4 lines 11-13, Kalbskopf discloses wherein the amount of binding agent is between 2-20% by weight related to the weight of the base material. This range meets the claimed limitation of “maximally 25%, 15%, 10%, or 4% by weight”.

6. In re claim 4, with reference to col.3 lines 8-30, Kalbskopf discloses the shaping treatment is performed between steps b) and c).

7. In re claim 5, with reference to col.2 lines 5-9, Kalbskopf discloses the organic base material consists of coco fibers.

8. In re claim 6, with reference to col.2 lines 5-9, Kalbskopf discloses the inorganic base material consists of rock wool.

9. In re claims 7 and 19, with reference to col.1 line 50 to col.2 line 4, Kalbskopf discloses the particulate base material has a diameter of preferably 2-10mm. This range meets the claimed limitation of a maximum size of 10mm or 5mm.

10. In re claim 11, with reference to col.4 lines 35-38, Kalbskopf discloses step c) is performed by means of a forced supply of gas.

11. In re claims 13 and 21, with reference to col.1 line 50 to col.2 line 4, Kalbskopf discloses during the shaping treatment a compression is performed on the mixture so

Art Unit: 3644

that the bulk density of the shaped article is between .08-.30 g/cm³. Therefore it is inherent that a compression is performed somewhere up to 80 or 99%.

12. In re claims 14, 22, and 23, with reference to col.2 lines 46-50, Kalbskopf discloses the melting range of the thermoplastic biologically degradable polymer is at a temperature ranging from 30-180 degrees, which falls within the broadly claimed limitation of 20-130 degrees, 40-120 degrees, or 60-100 degrees.

13. In re claim 15, with reference to col.4 lines 23-25, Kalbskopf discloses the heating step is obtained by the addition of hot air to the mixture. Kalbskopf does not specifically disclose that the hot air is steam. However it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided steam in order to provide more moisture to the medium.

14. In re claim 20, with reference to col.1 line 50 to col.2 line 4, Kalbskopf discloses the particulate base material has a diameter of preferably 2-10mm. Not disclosed is a maximum size of 1mm. It would have been an obvious matter of design choice to provide the base material with a size of 1mm, since applicant has not disclosed that having the material with a size of 1mm solves any stated problem or is for any particular purpose at it appears that the invention would perform equally well with a diameter range of 2-10mm as disclosed by Kalbskopf.

Art Unit: 3644

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalbskopf (EP 0294261 A1) in view of Hori et al (4,972,627) as applied to claims 1-2, 4-7, 11, and 13-23 above, and further in view of Tonkin et al (6,615,537).

16. In re claim 8, Kalbskopf discloses the claimed invention except for a biologically degradable elastomer.

17. However, with reference to col.4 lines 52-62, Tonkin et al disclose a culture medium with a biologically degradable elastomer (polyether). The advantage of this is to hold water and provide more moisture for the plants. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the medium of Kalbskopf with a biologically degradable elastomer as taught by Tonkin et al in order to hold water and provide more moisture for the plants.

Response to Arguments

18. Applicant's arguments filed 12/18/2008 have been fully considered but they are not persuasive.

19. In response to applicant's arguments that Kalbskopf does not disclose a particulate material but rather fibers, this argument is not persuasive because there is no structure claimed to prevent one from considering the fibers as taught by Kalbskopf to be particulate material, which is defined by Webster's II Dictionary Third Edition as "of, or made up of, separate particles."

20. In response to applicant's arguments that Kalbskopf does not disclose a special drying, this argument is not commensurate with the scope of the claims. The applicant does not claim a drying step.

Art Unit: 3644

21. In response to applicant's arguments that Kalbskopf teaches a synthetic binding material which is not biologically degradable, this argument is not persuasive because Kalbskopf discloses a thermoplastic binding material and thermoplastics are known to be biodegradable.

22. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

23. In response to applicant's arguments that Hori does not disclose the claimed layers or the fluidization of the binding agent, this argument is not persuasive because the Hori reference is used as a teaching reference to teach the method of folding the layered medium.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 3644

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONICA L. WILLIAMS whose telephone number is (571)270-3113. The examiner can normally be reached on Mon to Fri 6:00-3:30, Alternate Friday off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on 571-272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yvonne R. Abbott/
signing for Michael Mansen
Supervisory Patent Examiner

Application/Control Number: 10/545,192
Art Unit: 3644

Page 8

Art Unit 3644

MW 04/07/2009